

LECTURE 3

Agenda

- Lab 1 Statistics
- Attention

Announcements

- Lab 1 Due next class

Research paper

- Title
- Abstract
- Introduction (why?)
- Methods (how?)
- Results (what?)
- Discussion (so what?)
- References
- Appendix (not always necessary)

Methods – 3 sections

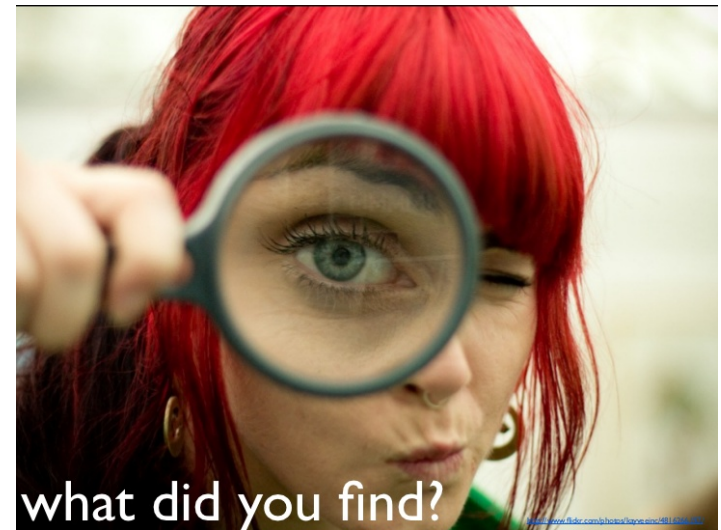


HOW?

- **Participants**
 - How many, Age, Gender
 - Other important information
 - If studying language, are they all native English speakers?
- **Materials**
 - What was the experiment run on? (computer)
 - What buttons did they press
 - How large were the stimuli
 - Everything you would need to know to run the experiment yourself
- **Procedure**
 - Step by step process of how the experiment was run

Results

- Write up what you found
 - Never say 'these results prove my hypothesis'
 - Science can never prove anything, only support or reject hypotheses
- STATISTICS
 - Do your statistics in SPSS (or others if you want)
 - Write up your stats in APA format.

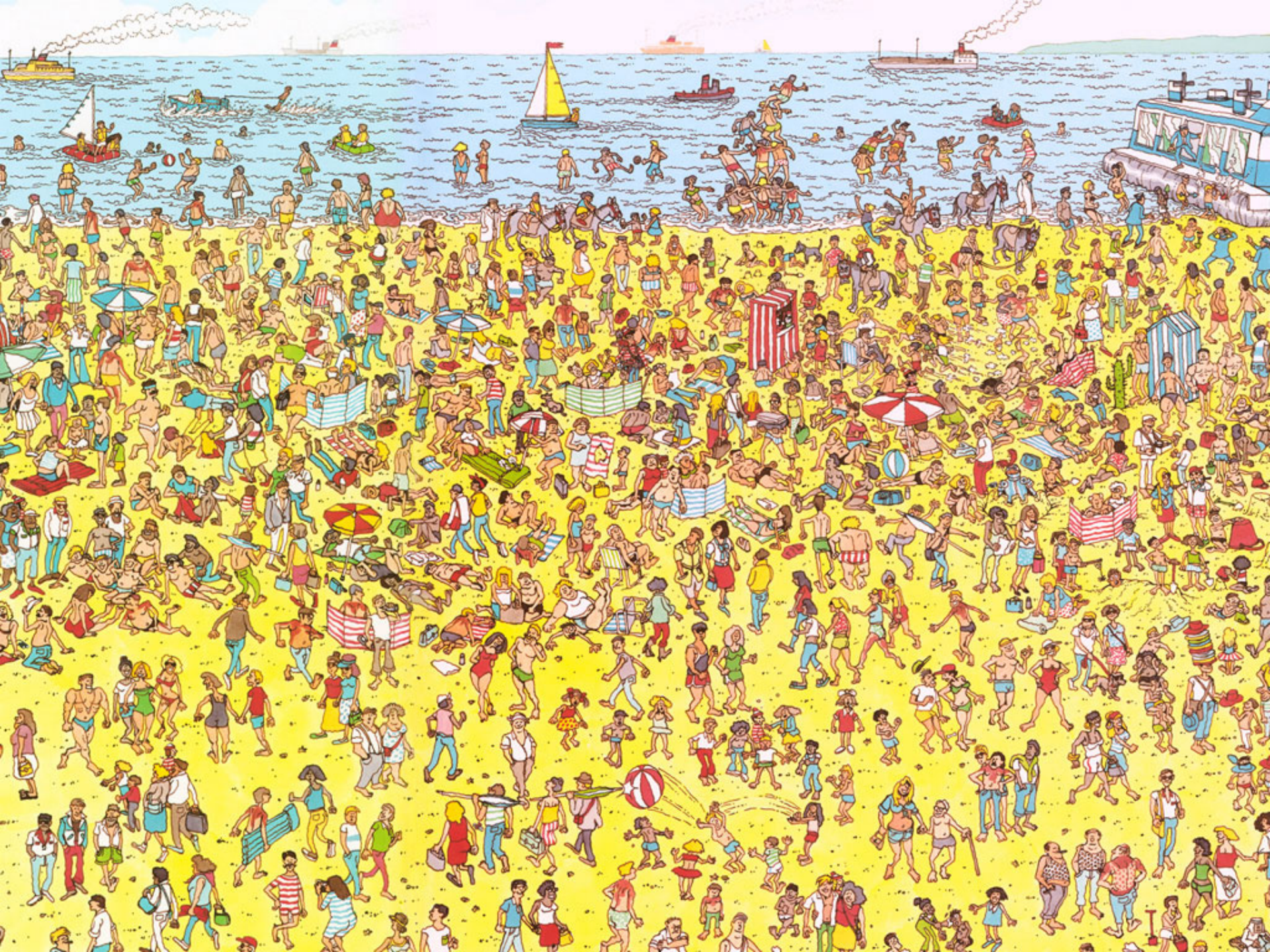


Statistics

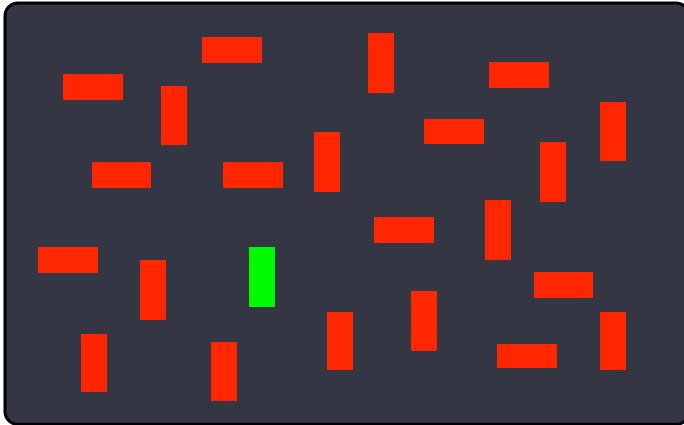
- T-tests – what you need to tell your reader
 - Means
 - Variance (SD)
 - t value
 - Degrees of freedom
 - p-value

In this experiment, we found that there is a significant difference ($M_{flicker} = 10599$, $SD_{flicker} = 100$, $M_{no flicker} = 5976$, $SD_{no flicker} = 120$, $t(135) = 5.10$, $p = 1.118e-06$) between the two conditions.

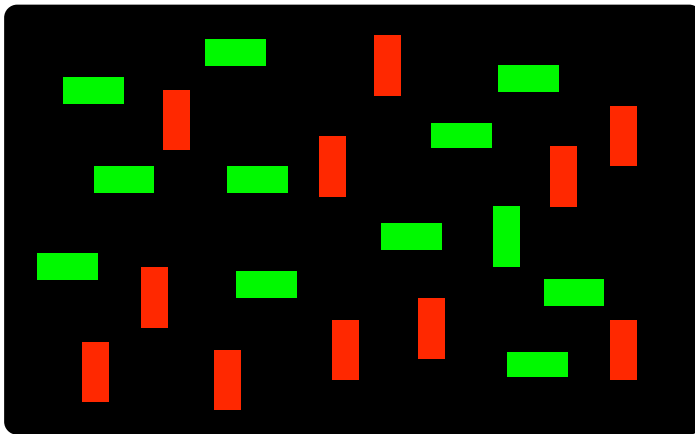




Visual search

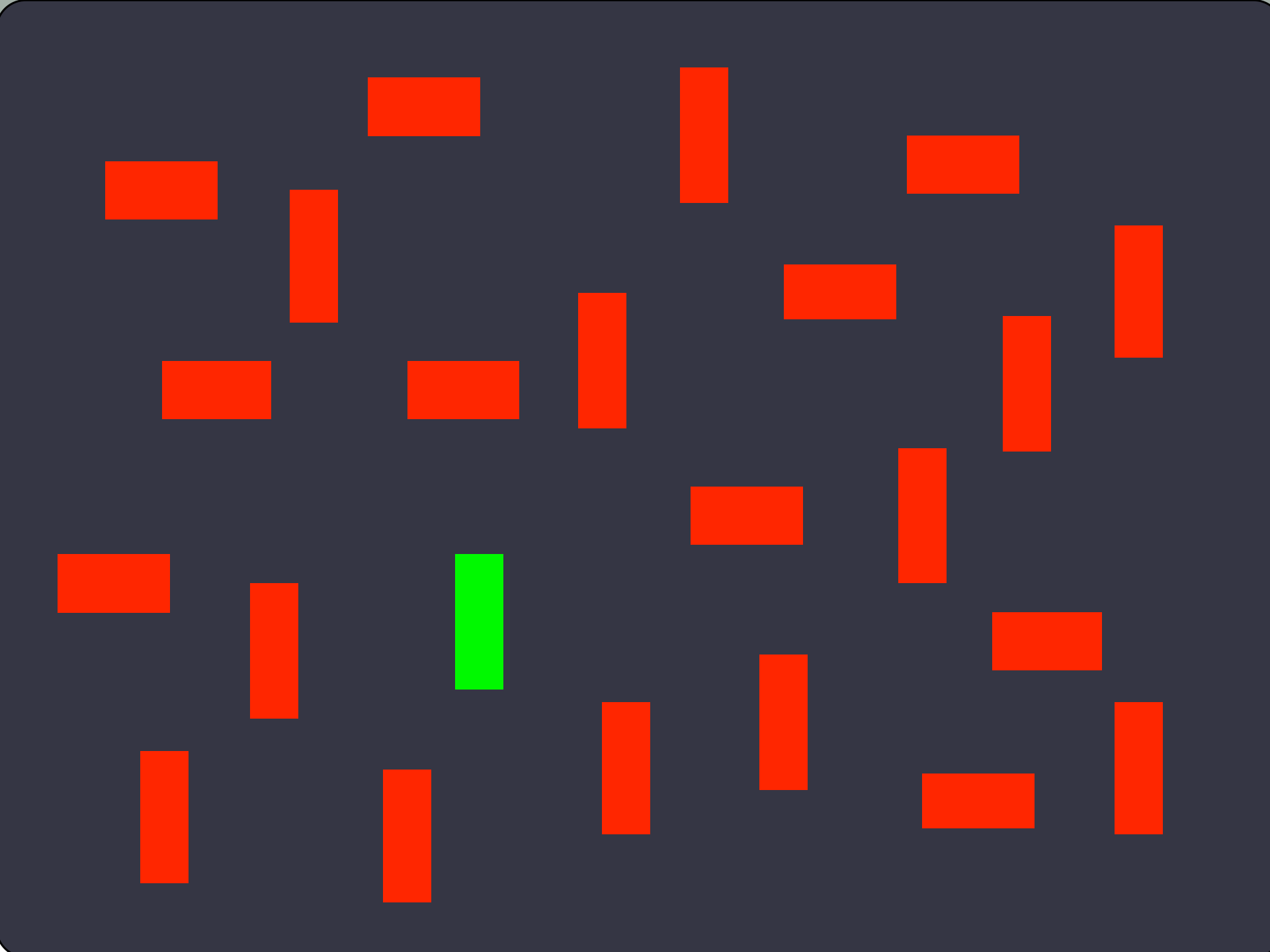


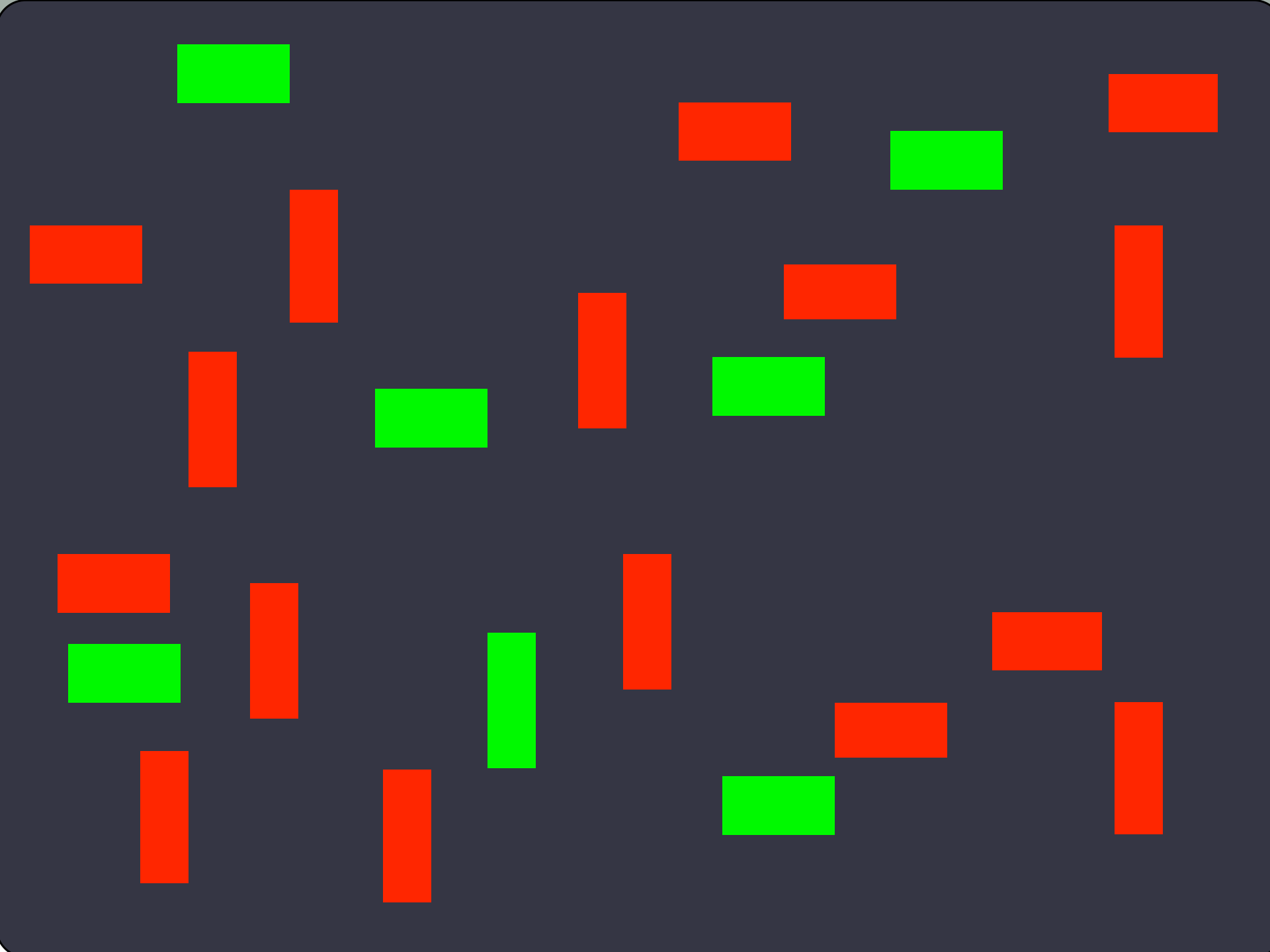
Feature search – search for only one feature (green)

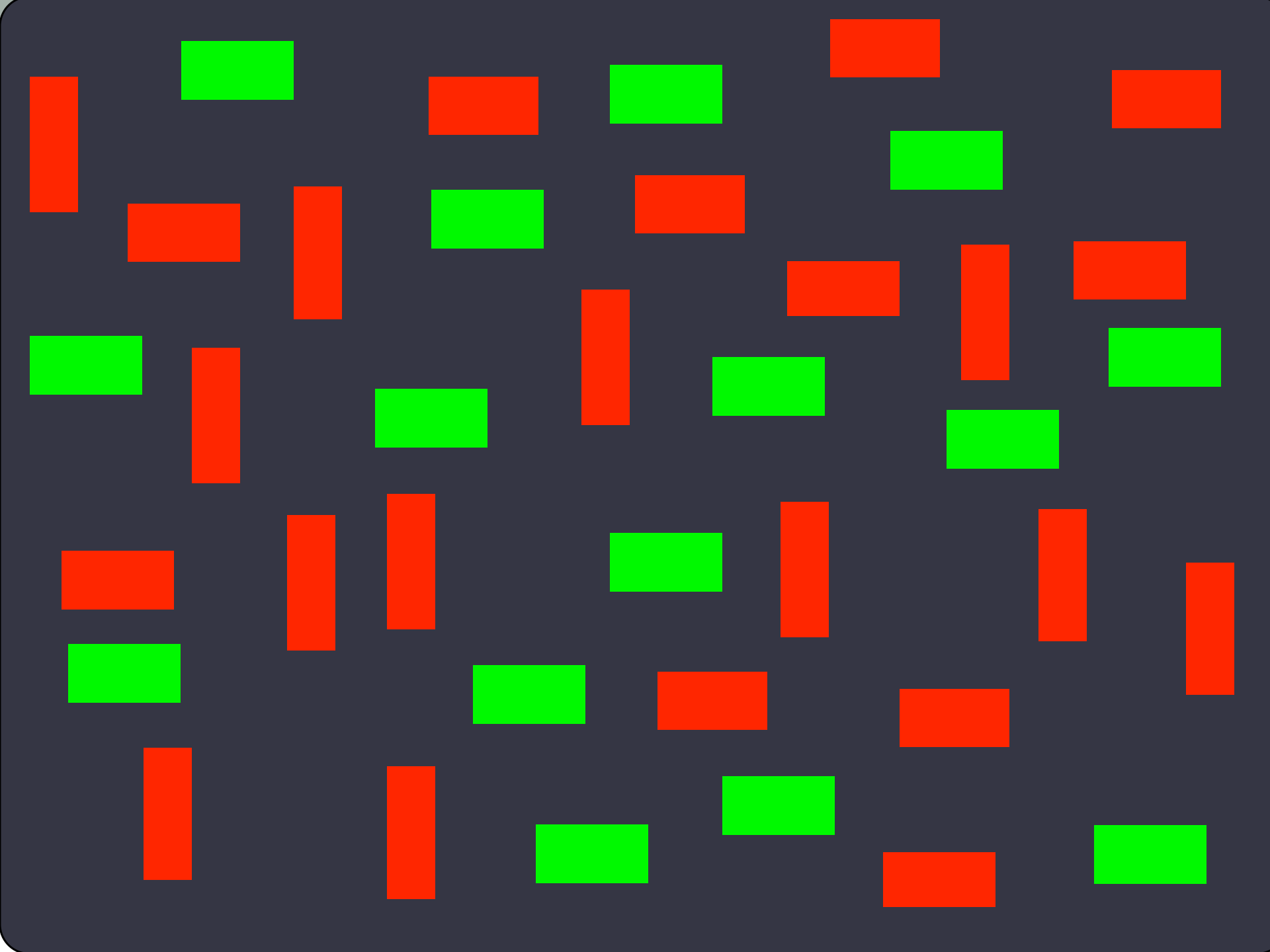


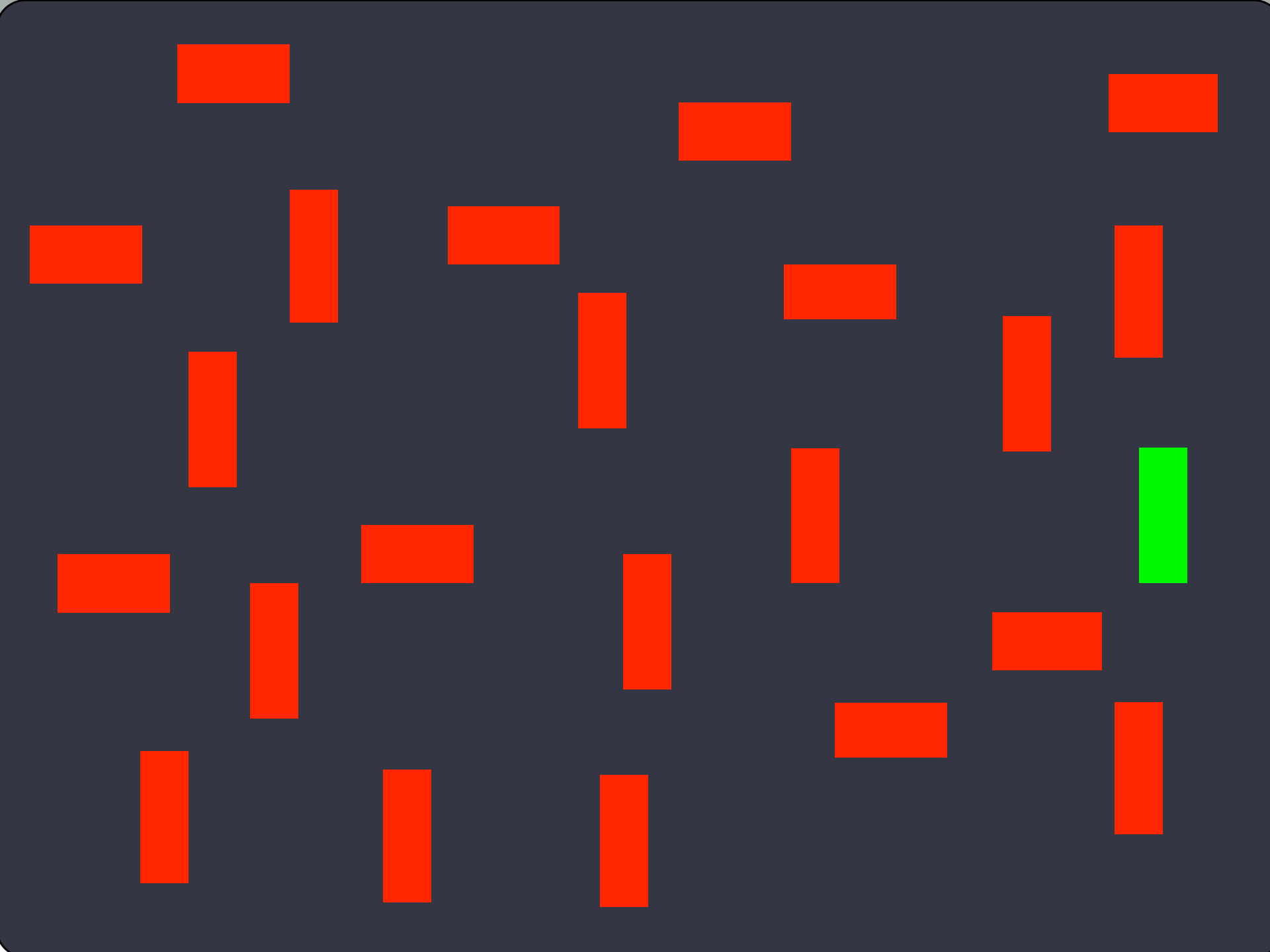
Conjunction search – search for multiple features (green, vertical)

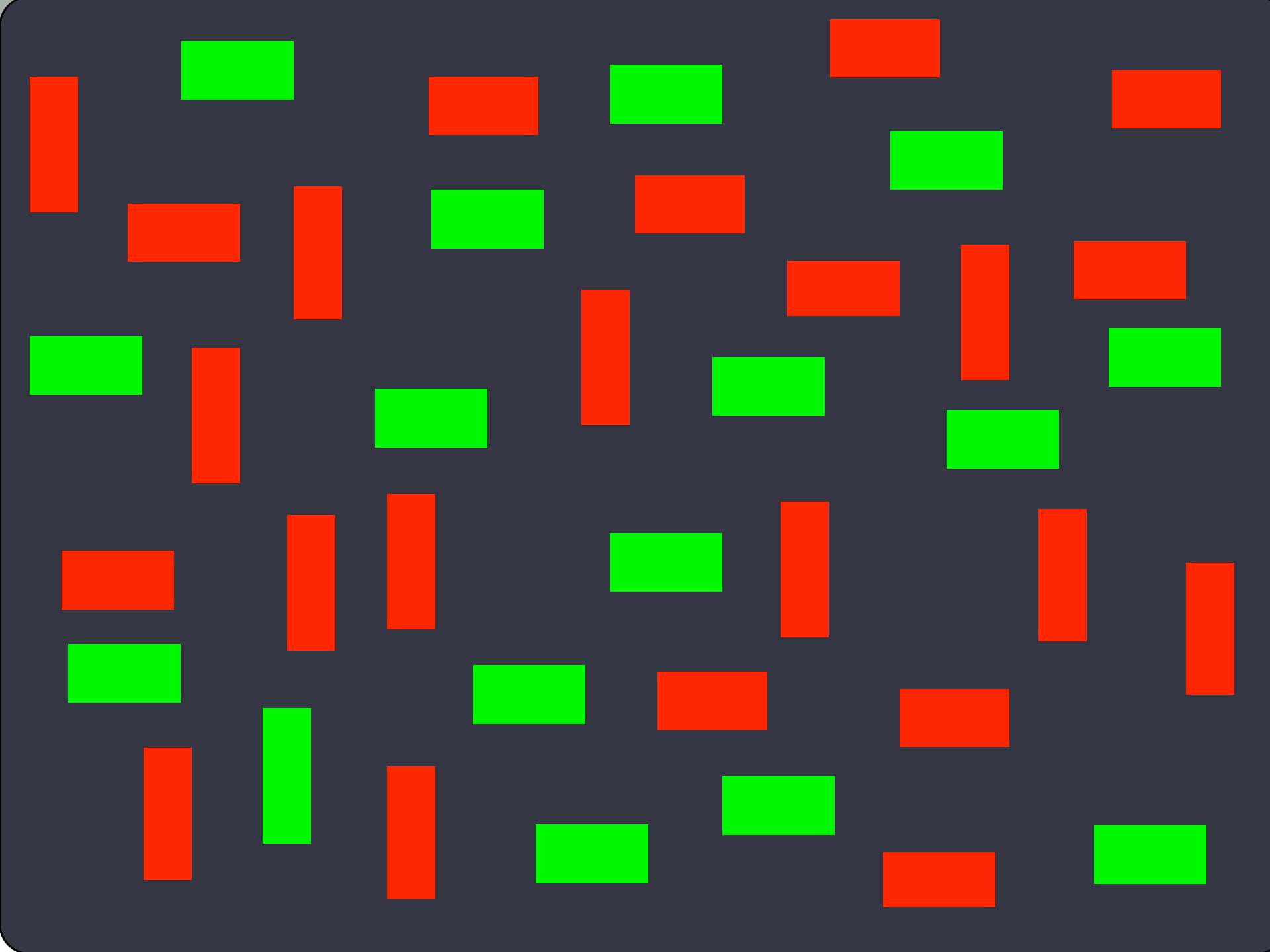
Laboratory version: Press one button for target-present and a different button for target-absent



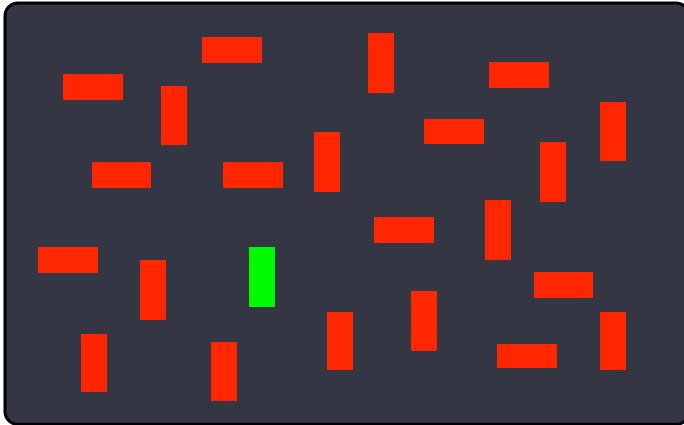




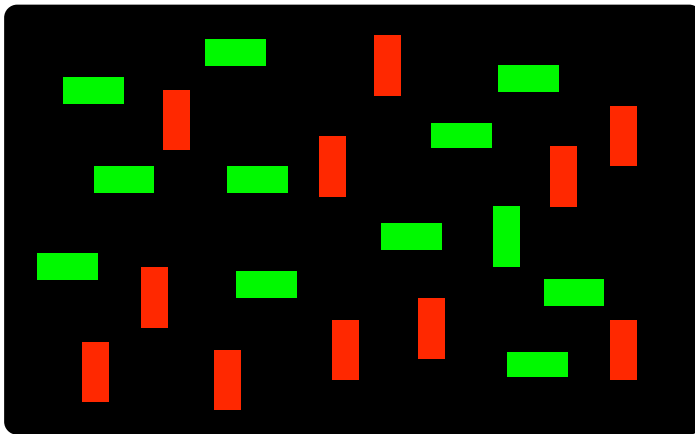




Visual search



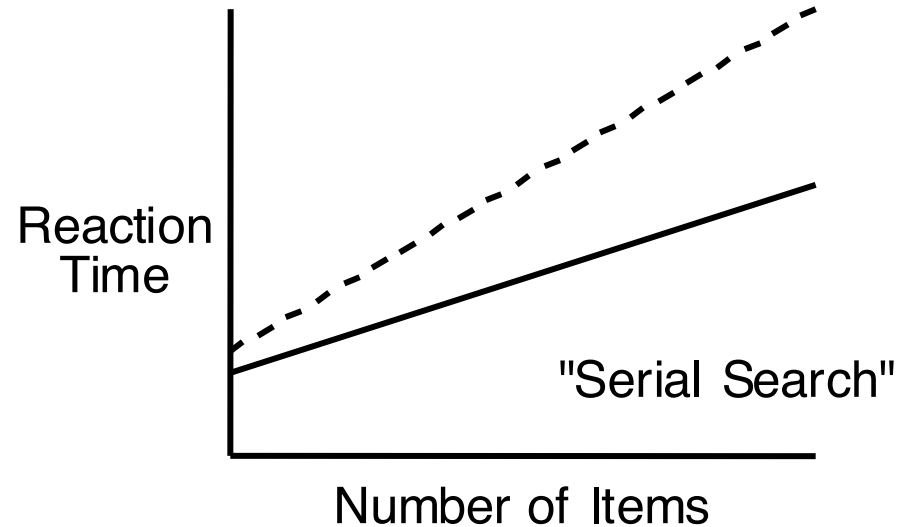
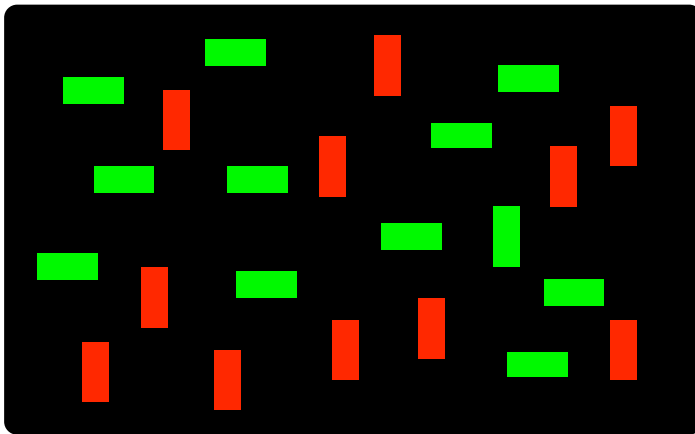
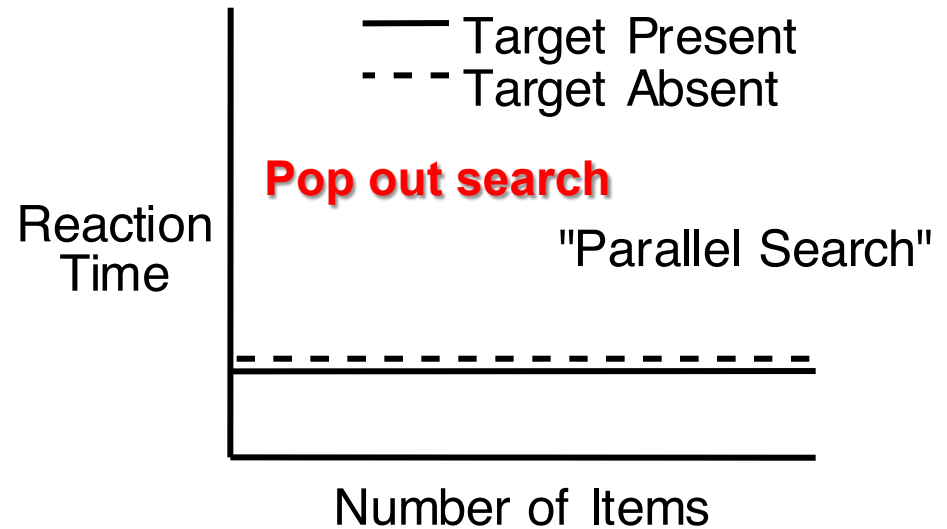
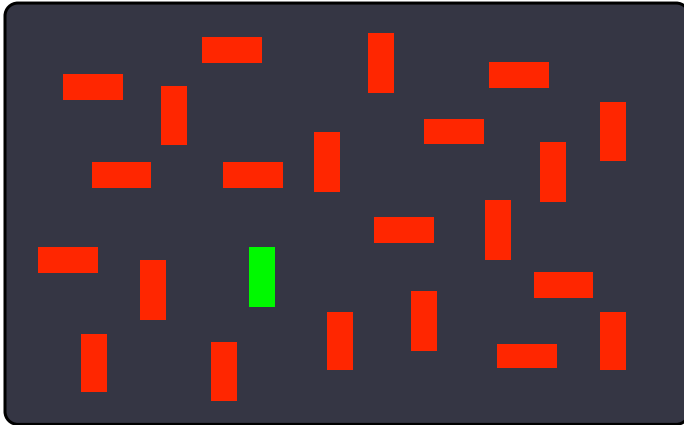
Feature search – search for only one feature (green)



Conjunction search – search for multiple features (green, vertical)

Laboratory version: Press one button for target-present and a different button for target-absent

Typical Search Results



Laboratory version: Press one button for target-present and a different button for target-absent

Lab 2 – Visual search

Instructions for next time

- Run yourself
- Run 3 other people and record their data in excel
- Send me your excel by next Monday (email)